

## **CURRICULUM VITAE**

**Matthew E. Nielsen, MD**

### **Education and Training:**

- 2010-present Master's of Science, Clinical Research (planned completion 2012)  
Department of Epidemiology, UNC School of Public Health  
Chapel Hill, North Carolina
- 2003-2008 Resident, Department of Urology  
The Johns Hopkins Hospital  
Baltimore, Maryland
- 2002-2003 Intern, Department of Surgery  
The Johns Hopkins Hospital  
Baltimore, Maryland
- 1998-2002 M.D.  
The Johns Hopkins University School of Medicine  
Baltimore, Maryland
- 1993-1998 B.A., with Distinction  
American Studies—Emphasis in Health Policy and Law  
University of Kansas  
Lawrence, Kansas

### **Professional Experience**

- 2009-present Assistant Professor  
Department of Surgery / Urology  
UNC Chapel Hill School of Medicine  
Chapel Hill, North Carolina
- 2009-present Research Fellow  
Cecil G. Sheps Center for Health Services Research  
UNC Chapel Hill  
Chapel Hill, North Carolina
- 2009-present Clinical Research Program Member  
Lineberger Comprehensive Cancer Center  
UNC Chapel Hill School of Medicine  
Chapel Hill, North Carolina

12/08-3/09    Visiting Assistant Professor  
Department of Surgery / Urology  
UNC Chapel Hill School of Medicine  
Chapel Hill, North Carolina

06/08-12/08    Instructor  
James Buchanan Brady Urological Institute  
Johns Hopkins Medical Institutions  
Baltimore, Maryland

### **Awards and Honors**

- National Institutes of Health Loan Repayment Program Award, 2010-2012
- 3<sup>rd</sup> Prize, AUA / Gyrus ACMI Clinical Research Essay Contest, American Urological Association National Meeting, 2008
- American Society for Clinical Oncology (ASCO) Merit Award, 2007
- 1<sup>st</sup> Prize Podium Presentation, The Maryland Urological Meeting, Baltimore, Maryland, 2007
- 2<sup>nd</sup> Prize, Pfizer Resident Clinical Research Essay Competition, Mid-Atlantic Section of the American Urological Association, 2006
- Alpha Omega Alpha, Johns Hopkins University School of Medicine, 2002
- Student Research Scholar, American Foundation for Urologic Diseases, 2001
- Harold Lamport Medical Student Research Prize, Johns Hopkins University School of Medicine, 2001
- Phi Beta Kappa, University of Kansas, 1998
- J. Michael Young Undergraduate Research Award, University of Kansas Honors Program, 1997
- Summerfield Scholarship for Excellence in Biomedical Sciences, University of Kansas, 1996
- Kansas Health Institute Health Policy and Law Summer Scholar, 1996

## BIBLIOGRAPHY

### Book Chapters:

1. Schaeffer EM, **Nielsen ME**, Gonzalgo ML and Schoenberg MP (2006): Nerve-sparing radical cystoprostatectomy, in *Bladder Cancer: Diagnosis, Therapeutics and Management*, Lee CT and Wood DP (Eds.), Humana Press. pp. 169-77.
2. **Nielsen ME** and Partin AW (2005): The role of complexed PSA (cPSA) in prostate cancer screening, in *Prostate Biopsy: Indications, Techniques and Complications*, Klein EA, ed. Contemporary Clinical Urology Series, Humana Press. pp. 29-41.
3. **Nielsen ME** (2005): Genitourinary trauma, in *The Brady Urology Manual*, Parsons JK and Wright EJ, eds. Taylor and Francis Books. pp. 263-272.
4. **Nielsen ME** and Wright EJ (2005): Neurourology, urodynamics and urogynecology, in *The Brady Urology Manual*, Parsons JK and Wright EJ, eds. Taylor and Francis Books. pp. 63-70.
5. Miles-Thomas JU, **Nielsen ME** and Nelson CP (2005): Pediatric genitourinary oncology, in *The Brady Urology Manual*, Parsons JK and Wright EJ, eds. Taylor and Francis Books. pp. 245-56
6. **Nielsen ME** (2005): Interstitial cystitis and chronic pelvic pain, in *The Brady Urology Manual*, Parsons JK and Wright EJ, eds. Taylor and Francis Books. pp. 85-93.

### *In Press / Submitted*

1. Manvar A, Wallen EM, Pruthi RS and **Nielsen ME** (2011). Epidemiology of Prostate Cancer, in *The Textbook of Prostate Cancer*, Tewari A (Ed.), Springer. 16 typed pages.
2. Ferguson J, Pruthi RS, Wallen EM and **Nielsen ME** (2011). Racial disparities and the global picture, in *The Textbook of Prostate Cancer*, Tewari A (Ed.), Springer, 7 typed pages.
3. Smith A, **Nielsen ME**, Wallen EM and Pruthi RS (2011). Patient surveillance after prostate cancer treatment, in *Patient Surveillance After Cancer Treatment*, Johnson F, Virgo K, Margenthaler J, *et al.* (Eds.), Springer. 7 typed pages.
4. Nix J, **Nielsen ME**, Wallen EM and Pruthi RS (2009). Robotic anterior exenteration in females: Technique, current status and outcomes, in *Robotic Urologic Surgery*, Menon M and Hemal A (Eds.). 9 typed pages.

### **Peer-Reviewed Original Research:**

1. Raynor MC, Lavien G, **Nielsen M**, Wallen EM and Pruthi RS (2011). Elimination of preoperative mechanical bowel preparation in patients undergoing cystectomy and urinary diversion. *Urol Oncol* (Epub ahead of print)
2. Stitzenberg KB, Wong YN, **Nielsen ME**, Eggleston BL, and Uzzo RG (2011). Trends in radical prostatectomy: Centralization, robotics and access to urologic cancer care. *Cancer* (Epub ahead of print)
3. Coward RM, Smith A, Raynor M, **Nielsen M**, Wallen EM and Pruthi RS (2011). Feasibility and outcomes of robotic-assisted laparoscopic radical cystectomy for bladder cancer in older patients. *Urology* 77(5): 1111-14.
4. Schultz L, Albadine R, Hicks J, Jadallah S, DeMarzo AM, Chen YB, **Nielsen ME**, Gonzalgo ML, Sidransky D, Schoenberg MP and Netto GJ (2010). Expression status and prognostic significance of mTOR pathway members in urothelial carcinoma of urinary bladder following cystectomy. *Cancer* 116(23): 5517-26.
5. Brannon AR, Reddy A, Seiler M, Arreola A, Moore DT, Pruthi RS, Wallen EM, **Nielsen ME**, Liu H, Nathanson KL, Ljungberg B, Zhao H, Brooks JD, Ghaneson S, Bhanot G, Rathmell WK (2010). Molecular stratification of clear cell renal cell carcinoma by consensus clustering reveals distinct subtypes and survival patterns. *Genes Cancer* 1(2): 152-63.
6. Pruthi RS, **Nielsen M**, Heathcote S, Wallen EM, Rathmell WK, Godley P, Whang Y, Fielding J, Schultz H, Grigson G, Smith A and Kim W (2010). A phase II trial of neoadjuvant erlotinib in patients with muscle-invasive bladder cancer undergoing radical cystectomy: clinical and pathological results. *BJU Int* 106(3): 349-56.
7. Kim W, Whang Y, Baggstrom M, Goyal L, Rathmell WK, **Nielsen M**, Wallen E, Pruthi R and Godley P (2010). Neoadjuvant docetaxel/estramustine prior to radical prostatectomy or external beam radiotherapy in high risk localized prostate cancer: a Phase II trial. *Urol Oncol* (Epub ahead of print)
8. Smith A, Kurpad R, Lal A, **Nielsen M**, Wallen E and Pruthi RS (2010). Cost analysis of robotic versus open radical cystectomy for bladder cancer. *J Urol* 183(2): 505-9.
9. Pruthi RS, **Nielsen M**, Smith A, Nix J, Kurpad R, Schultz H and Wallen E (2010). Fast track program in patients undergoing radical cystectomy: results in 362 consecutive cases. *J Amer Coll Surg* 210(1): 93-9.

10. Pruthi RS, Nix J, McRackan D, Hickerson A, **Nielsen ME**, Raynor M and Wallen EM (2010). Robotic-assisted laparoscopic intracorporeal urinary diversion. *Eur Urol* 57(6): 1013-21.
11. Pruthi RS, **Nielsen ME**, Nix J, Smith A, Schultz H and Wallen EM (2010). Robotic radical cystectomy for bladder cancer: Surgical and pathological outcomes in 100 consecutive cases. *J Urol* 183(2): 510-4.
12. Makarov DV, Landman A, Desai R, Penson DF, **Nielsen ME**, Loeb S, Leslie DL and Gross C (2010). Regional variation in total cost per radical prostatectomy in the HCUP-NIS database. *J Urol* 183(4): 1504-9
13. Cowey CL, Amin C, Pruthi RS, Wallen EM, **Nielsen ME**, Grigson G, Watkins C, Nance KV, Crane J, Jalkut M, Kim WY, Godley P, Whang YE, Fielding J and Rathmell WK (2010). A neoadjuvant clinical trial with sorafenib for patients with stage II or greater renal cell carcinoma. *J Clin Oncol* 28(9): 1502-7
14. Shariat SF, Chade DC, Karakiewicz PI, Ashfaq R, Isbarn H, Fradet Y, Bastian PJ, **Nielsen ME**, Capitanio U, Jeldres C, Montorsi F, Lerner SP, Sagalowsky AI, Cote RJ and Lotan Y (2010). Combination of multiple molecular markers can improve prognostication in patients with locally advanced and lymph node positive bladder cancer. *J Urol* 183(1): 68-75
15. Nix J, Smith A, Kurpad R, **Nielsen ME**, Wallen EM and Pruthi RS (2009). Prospective randomized controlled trial of robotic versus open radical cystectomy for bladder cancer: Perioperative and pathologic results. *Eur Urol* 57(2): 196-201.
16. Guzzo, TJ, Bivalacqua TJ, **Nielsen ME**, Magheli A, Schoenberg MP and Gonzalgo ML (2009). Pathologic upstaging at the time of radical cystectomy is associated with worse recurrence-free survival in patients with BCG-refractory bladder cancer. *Urology* 74(6): 1276-80.
17. Shariat SF, Bolenz C, Karakiewicz PI, Fradet Y, Ashfaq R, Bastian PJ, **Nielsen ME**, Capitanio U, Jeldres C, Rigaud J, Muller SC, Lerner SP, Montorsi F, Sagalowsky AI, Cote RJ and Lotan Y (2009). P53 expression in patients with advanced urothelial carcinoma of the urinary bladder. *BJU Int* 105(4): 489-95.
18. Shariat SF, Lotan Y, Karakiewicz PI, Ashfaq R, Isbarn H, Fradet Y, Bastian PJ, **Nielsen ME**, Capitanio U, Jeldres C, Montorsi F, Muller SC, Karam JA, Heukamp LC, Netto G, Lerner SP, Sagalowsky AI and Cote RJ (2009). p53 predictive value for pT1-2N0 disease at radical cystectomy. *J Urol* 182(3): 907-13.

19. Pruthi RS, Belsante J, Kurpad R, **Nielsen ME** and Wallen EM (2009). Robotic cystectomy and the internet: Separating fact from fiction. *Urol Oncol* (Epub ahead of print)
20. Kurpad R, Kim W, Rathmell WK, Godley P, Whang Y, Fielding J, Smith L, Pettiford A, Schultz H, **Nielsen M**, Wallen EM and Pruthi RS (2009). A multidisciplinary approach to the management of urologic malignancies: Does it influence diagnostic and treatment decisions? *Urol Oncol* (Epub ahead of print)
21. Shariat SF, Karakiewicz PI, Godoy G, Karam J, Ashfaq R, Fradet Y, Capitanio U, Montorsi F, Bastian PJ, **Nielsen ME**, Muller S, Rigaud J, Sagalowsky AI and Lotan Y (2009). Survivin as a prognostic marker for urothelial carcinoma of the bladder: A multi-institutional external validation study. *Clin Cancer Res* 15(22): 7012-19.
22. Margulis V, Lotan Y, Karakiewicz PI, Fradet Y, Ashfaq R, Capitanio U, Montorsi F, Bastian PJ, **Nielsen ME**, Muller SC, Rigaud J, Heukamp LC, Netto G, Lerner SP, Sagalowsky AI and Shariat SF (2009). Multi-institutional external validation of the predictive value of KI-67 labeling index in patients treated with radical cystectomy. *J Natl Cancer Inst* 101(2):114-9
23. **Nielsen ME**, Schaeffer EM, Marschke P and Walsh PC (2008). High anterior release of the levator fascia improves sexual function following open radical retropubic prostatectomy. *J Urol* 180(6): 2557-64
24. Wu I, **Nielsen ME**, Han M, Partin AW and Makarov DV (2008). Does laterality of positive needle biopsy in clinical T2a prostate cancer patients affect biochemical recurrence-free survival? *Urology* 72(6): 1219-23.
25. Hernandez DJ, **Nielsen ME**, Han M, Trock BJ, Partin AW, Walsh PC and Epstein JI (2008). Natural history of pathologically organ-confined (pT2), Gleason Score 6 or less, prostate cancer after radical prostatectomy. *Urology* 72(1): 172-6.
26. Osunkoya AO, **Nielsen ME**, Epstein JI (2008). Prognosis of mucinous adenocarcinoma of the prostate treated by radical prostatectomy: A study of 47 cases. *Am J Surg Pathol* 32(3): 468-72.
27. **Nielsen ME**, Makarov DV, Humphreys E, Mangold L, Partin AW and Walsh PC (2008). Is it possible to compare PSA recurrence-free survival after surgery and radiotherapy using the revised ASTRO criterion—"Nadir +2". *Urology* 72(2):389-93
28. Wagner A, Muntener M, Makarov DV, **Nielsen M**, Scorpio D and Kavoussi LR (2008): Totally laparoscopic creation of a novel stapled orthotopic neobladder in a porcine model. *J Endourol* 22(1): 151-6.

29. **Nielsen ME**, Bastian, PJ, Palapattu GS, Trock BJ, Schoenberg MP, Chan T and Rogers CG (2007). Recurrence-free survival following radical cystectomy of patients downstaged by transurethral resection. *Urology* 70(6):1091-5
30. **Nielsen ME**, Lima G, Schaeffer EM, Porter J, Cadeddu JA, Tuerk IA, Kavoussi LR (2007): The oncological efficacy of laparoscopic RPLND in the treatment of clinical stage I nonseminomatous germ cell testis cancer. *Urology* 70(6): 1168-72.
31. Hernandez DJ, **Nielsen ME**, Han M and Partin AW (2007). Contemporary evaluation of the D/Amico risk classification of prostate cancer. *Urology* 70(5): 931-5.
32. Muntener M, Schaeffer EM, Romero FR, **Nielsen ME**, Allaf ME, Brito FA, Pavlovich CP, Kavoussi LR and Jarrett TW (2007). Incidence of local recurrence and port site metastasis after laparoscopic radical Nephroureterectomy. *Urology* 70(5): 864-8.
33. Kleeberger W, Bova GS, **Nielsen ME**, Herawi M, Chuang AY, Epstein JI and Berman DM (2007). Roles for the stem cell-associated intermediate filament Nestin in prostate cancer migration and metastasis. *Cancer Research* 67(19): 9199-206
34. **Nielsen ME**, Shariat SF, Karakiewicz PI, Amiel GE, Rogers CG, Lotan Y, Bastian PJ, Vazina A, Gupta A, Lerner SP, Sagalowsky AI, Schoenberg MP and Palapattu, GS (2007). Delay in radical cystectomy over three months is not associated with worse clinical outcome. *BJU Int* 100(5): 1015-20
35. Muntener M, Epstein JI, Hernandez DJ, Gonzalgo ML, Humphreys EB, Mangold LA, Walsh PC, Partin AW and **Nielsen ME** (2007). Prognostic significance of Gleason score discrepancies between needle biopsy and radical prostatectomy. *EurUrol* 53(4):767-76.
36. Chuang AY, **Nielsen ME**, Hernandez DJ, Walsh PC and Epstein JI (2006). The significance of positive surgical margin in areas of capsular incision in otherwise organ-confined disease at radical prostatectomy. *J Urol* 178(4): 1306-10.
37. Tamas EF, **Nielsen ME**, Schoenberg MP and Epstein JI (2007). Lymphoepithelioma-like carcinoma of the urinary tract: A clinicopathologic study of 30 pure and mixed cases. *Mod Pathol* 20(8): 828-34.
38. Muntener M, **Nielsen ME**, Romero FR, Schaeffer EM, Allaf ME, Brito FAR, Pavlovich CP, Kavoussi LR, and Jarrett TW (2007). Long-term oncological outcome after laparoscopic radical nephroureterectomy for upper tract transitional cell carcinoma *Eur Urol* 51(6): 1639-44.

39. Rubio-Viqueira B, Mezzadra H, **Nielsen ME**, Jimeno A, Iacobuzio-Donahue C, Maitra A, Hidalgo, M and Altiock S (2007). Optimizing the development of targeted agents in pancreatic cancer: Tumor fine needle aspiration biopsy as a platform for novel ex vivo drug sensitivity assays. *Molecular Cancer Therapeutics* 6(2): 515-23
40. **Nielsen ME**, Shariat SF, Amiel GE, Rogers CG, Karakiewicz PI, Lotan Y, Bastian PJ, Vazina A, Lerner SP, Sagalowsky AI, Schoenberg MP and Palapattu, GS (2007). Age is associated with disease-specific survival in patients treated with radical cystectomy for transitional cell carcinoma. *European Urology* 51(3): 699-706
41. Huston KK, **Nielsen ME** and Gelber AC (2006) High Pressure Surgery. *American Journal of Medicine* 119: 740-2.
42. Hidalgo M, Amador ML, Jimeno A, Mezzadra H, Patel P, Chan A, **Nielsen ME**, Maitra A and Altiock S (2006). Assessment of gefitinib- and CI-1040-mediated changes in epidermal growth factor receptor signaling in HuCCT-1 human cholangiocarcinoma by serial fine needle aspiration. *Molecular Cancer Therapeutics* 5(7):1895-1903
43. **Nielsen ME**, Zderic S, Freedland SJ, Jarow JP (2006). Insight into the pathogenesis of varicoceles: Relationship of varicocele with body mass index, *Urology* 68(2): 392-6
44. **Nielsen ME**, Han M, Mangold L, Humphreys E, Walsh PC, Partin AW, Freedland SJ (2006). African-American race does not independently predict adverse outcome following radical retropubic prostatectomy at a tertiary referral center, *J Urol* 176(2): 515-9
45. Freedland SJ, Grubb KA, Yiu SK, **Nielsen ME**, Mangold L, Isaacs WB, Epstein JI, and Partin AW (2005). Obesity and capsular incision at the time of open radical retropubic prostatectomy, *J Urol* 174 (5): 1798-801
46. Freedland SJ, Grubb KA, Yiu SK, Humphreys EB, **Nielsen ME**, Mangold LA, Isaacs WB, and Partin AW (2005). Obesity and risk of biochemical progression following radical prostatectomy at a tertiary care referral center, *J Urol* 174(3): 919-22.
47. **Nielsen ME** and Walsh PC (2005). Systematic detection and repair of subclinical inguinal hernias at the time of radical retropubic prostatectomy, *Urology* 66(5):1034-7

### **Original Research In Press / Submitted for Peer Review:**

1. **Nielsen ME**, Smith AB, Pruthi RS, Guzzo TJ, Amiel G, Shore N and Lotan Y (2011). Reported use of intravesical therapy for non-muscle-invasive bladder cancer: results from the BCAN survey. Submitted to *BJU International*. 14 typed pages.
2. Zhang Y, Denton BT and **Nielsen ME** (2011). Comparison of surveillance strategies for low risk bladder cancer patients. Submitted to *Medical Decision Making*. 15 typed pages.

### **Other Peer-Reviewed Articles:**

1. Manvar AM, Wallen EM, Pruthi RS, and **Nielsen ME** (2010). Prognostic value of CA125 in transitional cell carcinoma of the bladder. *Expert Rev Anticancer Ther* 10(12): 1877-81.
2. **Nielsen ME**, Trock BJ and Walsh PC (2010). Counseling patients on the benefits: Salvage versus adjuvant radiation. *JNCCN* 8(2): 228-37.
3. Smith AB, **Nielsen ME**, Wallen EM and Pruthi RS (2010). Current status of robot-assisted radical cystectomy. *Curr Opin Urol* 20(1): 60-4
4. **Nielsen ME** and Partin AW (2008). Comparing apples and oranges: Differences in risk implication of standard definitions of biochemical failure following surgery or radiation therapy for clinically localized prostate cancer. *AUA News* 13(5): 2-3.
5. **Nielsen ME** and Partin AW (2007). The impact of definitions of failure on the interpretation of biochemical recurrence following treatment of clinically localized prostate cancer. *Rev Urol* 9(2): 57-62.
6. **Nielsen ME**, Schaeffer EM, Veltri, R, Schoenberg MP and Getzenberg RH (2006) Urinary markers for bladder cancer detection: what's new? *Curr Opin Urol* 16(5):350-5.
7. **Nielsen ME**, Gonzalgo ML, Schoenberg MP and Getzenberg RH (2006). Towards critical evaluation of the role(s) of molecular biomarkers in the management of bladder cancer. *World J Urol* 24(5): 499-508.
8. **Nielsen ME** and Getzenberg RH (2006) New directions in bladder cancer: Diagnosis and treatment. *European Pharmacotherapy 2005: Business Briefing*

### **Invited Editorials:**

1. **Nielsen ME** (2010). Use and misuse of imaging by urologists. *J Urol* 184(1): 12-4
2. **Nielsen ME** (2009). How bad are positive margins after radical prostatectomy—and how are they best managed? *J Urol* 182(4): 1257-8.
3. **Nielsen ME** (2008). Neoadjuvant gemcitabine and cisplatin: another step on the path towards improving the outcomes of patients with high-risk, invasive bladder cancer. *Cancer* 113(9): 2379-81.
4. Kavoussi LR, **Nielsen M**, Solomon SB (2006): Percutaneous image-guided urologic procedures. *Radiology* 239 (1):11-2.
5. Permpongkosol S, **Nielsen ME**, and Solomon S (2006). Percutaneous renal cryoablation. *Urology* 68 (1): s19-s25.
6. Kavoussi L, **Nielsen M**, and Solomon S (2005): Percutaneous, image-guided urological procedures: barbarians at the gate. *J Urol* 174(1):11.

### **Published Abstracts:**

1. Cohen M, McCadden J, **Nielsen M**, Chowdhry W, Kruszewski M, Carducci M, and Rodriguez R. Prostate cancer cryoimmunotherapy: A study of combined cryoablation with adenoviral granulocyte-macrophage colony stimulating factor and cytotoxic T lymphocyte-associated antigen 4 (CTLA-4) blockade. *Proc Am Assoc Cancer Res*, 43: 1113 (5515), 2002.
2. Ramakrishna, N, Rioseco-Comacho, NS, **Nielsen, ME**, Wu, X, Yu, DC, Henderson, DR, Simons, JW and DeWeese, TL. Ionizing Radiation Enhances Therapeutic Efficacy and Replication of the Oncolytic Adenovirus CN706 in the LNCAP Prostate Cancer Cell Line. *Proc Am Assoc Cancer Res*, 41:731, 2000

### **Invited Oral Presentations**

- Patterns of Care in Non-Muscle-Invasive Bladder Cancer: Results from the BCAN Survey. 9<sup>th</sup> Annual Landes Symposium, Chapel Hill, North Carolina, June 17, 2011
- Bladder Cancer: Needs and Opportunities for Comparative Effectiveness Research. Center for Outcomes and Evidence Seminar, Agency for Healthcare Research and Quality, Rockville, Maryland, April 28, 2011

- Bladder Cancer Basics. Urology Nursing Society Southeast Regional Meeting, Chapel Hill, North Carolina, March 25, 2011
- Risk Stratification and Decision Making in Urologic Oncology. UNC Center for Gastrointestinal and Bowel Disease (CGIBD) Epidemiology Seminar, Chapel Hill, North Carolina, December 15, 2010
- Prostate Cancer Update. Wakefield Rotary International, Wake Forest, North Carolina, October 14, 2010
- Genitourinary Oncology: Prostate, Bladder and Kidney Cancer. Orange County Senior Center, Hillsborough, North Carolina, September 15, 2010
- PSA and Prostate Cancer Update: 2010. Chapel Hill Senior Center “Meet the Expert” Lecture Series, Chapel Hill, North Carolina, September 1, 2010
- Who Is and Who Is Not a Candidate for Active Surveillance (Keynote lecture). Living With and Beyond Cancer Series, Rex/UNC Healthcare, Raleigh, North Carolina. June 12, 2010
- Risk Stratification as a Framework for Evaluating Quality of Cancer Care. VA Health Services Research (HSR&D) Working Group, Durham, North Carolina. June 8, 2010
- Updated Prostate Cancer Surveillance Program Guidelines. Rex Cancer Center Genitourinary Oncology Journal Club, Raleigh, North Carolina. June 3, 2010.
- Bladder Cancer Basics: Diagnosis and Detection. Bladder Cancer Advocacy Network Patient Forum, Chapel Hill, North Carolina. May 15, 2010
- Cancer Decision Making: Uncertainty and Competing Risks. North Carolina State University Department of Operations Research, Raleigh, North Carolina. April 21, 2010
- Prostate Cancer Update 2010: Active Surveillance of Favorable Risk Disease. Texas Association of Genitourinary Surgeons Annual Meeting. Chapel Hill, North Carolina, April 17, 2010
- Active Surveillance for Prostate Cancer and the Multidisciplinary Team Approach at the Lineberger Cancer Center. Chapel Hill Prostate Cancer Support Group, Chapel Hill, North Carolina, February 27, 2010
- Prostate Cancer Update 2009. North Carolina Academy of Family Physicians Winter 2009 Meeting, Asheville, North Carolina, December 4, 2009

- What's New at UNC Chapel Hill Urology: New Techniques for Nerve-Sparing Open Prostatectomy and the Hopkins Active Surveillance Protocol. Lee County Prostate Cancer Support Group, Sanford, North Carolina, March 10, 2009
- Genitourinary trauma: Clinical issues relevant to contemporary nursing practice. Johns Hopkins Hospital Department of Nursing Trauma Continuing Education Lecture series, Baltimore, Maryland, March 20, 2008.
- A critical analysis of the interpretation of biochemical recurrence in surgically treated patients using the revised ASTRO criterion—"Nadir + 2." The Maryland Urological Meeting, Baltimore, Maryland, November 10, 2007.
- Visiting Resident Speaker, Abraham T. Spence Visiting Professorship, University of Texas, Southwestern Medical Center, Dallas, Texas, 2006.

## **TEACHING RECORD**

### **Lecture / Classroom instruction:**

- Prostate Diseases Lecture (annual). UNC Chapel Hill School of Medicine 2<sup>nd</sup> year Curriculum, 2009-present
- Urologic Oncology lecture (monthly), UNC Chapel Hill School of Medicine Third Year Surgery Clerkship, 2009-present
- Gross Anatomy Dissection for Outgoing UNC Chapel Hill Medical Students in Urology (annual). UNC Chapel Hill School of Medicine Capstone Program, 2009-present
- Director of Weekly Urology Resident / Student Didactic Lecture Series, Johns Hopkins Hospital Brady Urological Institute; 2008
- Johns Hopkins University School of Medicine Freshman Histology, Laboratory Teaching Assistant, 2002

### **Grand Rounds**

- Renal Cell Carcinoma 2009: Challenges and Opportunities. UNC Chapel Hill Department of Surgery Grand Rounds, March 18, 2009
- Bladder Cancer Research: Opportunities for Discovery. Vattikuti Urological Institute Grand Rounds, Henry Ford Hospital, Detroit, Michigan. October 19, 2007.

*Brady Urological Institute Grand Rounds(Category I CME)  
Johns Hopkins Medical Institutions, Baltimore, Maryland:*

- February 2008: Management of Neurogenic Bowel in Spina Bifida
- August 2007: Gleason Grade Discordance from Biopsy to Prostatectomy
- March 2007: Targeting Targeted Therapy in Bladder Cancer
- December 2006: Traumatic Injuries to Male Genitalia
- August 2006: Patient Age and Bladder Cancer Outcomes
- March 2006: Urinary Markers for Bladder Cancer Detection
- July 2005: Management of Ureteral Tumors
- March 2005: Genitourinary Tuberculosis
- October 2004: Adrenocortical Carcinoma
- September 2004: Ejaculatory Duct Obstruction
- August 2004: Incidentally Detected Adrenal Masses
- March 2004: Cytoreductive Nephrectomy

### **Research Mentorship:**

- Medical Students: Ina Wu 2005-2006, Marisa Meyer 2008, Jeremy Reese 2009, Megan Feng 2011 (National Institute of Aging Medical Student Training in Aging Research Scholar)
- Residents: David Hernandez 2005-2006, Ashley Ross 2008, Jeff Nix 2009, Angela Smith 2011
- Research Fellows: Michael Muntener 2005-2006, Jed Ferguson 2010-11, Ankur Manvar 2010-11
- Graduate Student Supervision:
  - Samira Brooks, PhD Candidate, Program in Translational Medicine, Howard Hughes Medical Institute / UNC School of Medicine, 2011-present
  - Laurel Clayton, PhD Candidate, Health Policy and Management, UNC Gillings School of Public Health, 2009-present (Dissertation Committee Member)
  - Yuan Zhang, PhD Candidate, Industrial Engineering and Operations Research, North Carolina State University, 2009-present
  - Josip Vukina, MPH Candidate, UNC Gillings School of Public Health, 2010-2011
  - Wei-Shi Yeh, PhD Candidate, Health Policy and Management, UNC Gillings School of Public Health, 2009-2010

### **Attending on Clinical Service:**

- Assistant Chief of Service (Attending for Urology Consult Service) 7/08-12/08  
Johns Hopkins Hospital, Baltimore, Maryland
- Assistant Professor of Surgery / Urology, UNC Chapel Hill School of Medicine  
1/09-Present

## **GRANTS**

*Current:*

UNC Clinical Translation Science Award (CTSA) M. Runge (PI) 5/19/08-4/30/13  
K12 Scholars Program (KL2) NIH/NCRR 1KL2RR025746 \$2,090,864 (Direct)  
*Risk-Treatment Mismatch and Decision Making in Urologic Oncology*

*50% effort / 50% salary support*

A national consortium with the goal of transforming how clinical and translational research is conducted, ultimately enabling researchers to provide new treatments more efficiently and quickly to patients.

*Role: KL2 Scholar*

AHRQ Recovery Act Grant 1R18AE000023-01 \$2,902,667 9/1/10-8/1/13

C. Lewis (UNC) and D. Frosch (Palo Alto Medical Research Foundation) (co-PIs)

*Accelerating Adoption of CER Results With Patient Decision Support Interventions*

*5% effort / 0% salary support*

Randomized trials of decision support interventions surrounding decisions to undergo PSA screening (study 1) and treatment decision-making for men diagnosed with low risk clinically localized prostate cancer (study 2)

*Role: Lead investigator for Study 2 at UNC site*

*Completed:*

Trainee Mini-grant George Netto (co-PI) 7/1/06-6/30/07

National Kidney Foundation of Maryland \$10,000

*Biomarkers of Recurrent and Lethal Bladder Cancer in Primary Cystectomy Tissue*

*20% effort (no salary support)*

This project supported the construction of a bladder cancer tissue microarray of cystectomy specimens from patients who developed metastasis and / or bladder cancer-specific mortality after cystectomy alongside recurrence-free cases, creating a resource to facilitate the evaluation of candidate biomarkers.

*Role: Co-investigator*

Professional Development Award Soner Altioek (co-PI) 7/1/06-6/30/07

National Kidney Foundation of Maryland \$40,000

*Prediction and Assessment of Response to Targeted Therapy in Bladder Cancer*

*20% effort (no salary support)*

The primary goal of this study is the evaluation of a panel of small-molecule tyrosine kinase inhibitors targeting signaling pathways implicated in the pathogenesis of bladder cancer. The ultimate goal of the project is to identify potential novel therapeutic agents for bladder cancer as well as to develop and characterize candidate biomarkers to guide treatment selection in individual patients

*Role: Co-investigator*

Kirchstein National Research Service Award Don Coffey (PI) 7/1/05-6/30/06

National Institutes of Health grant # T32-DK007552-19 \$43,428

Clinical and translational research in urologic oncology

*100% effort / 100% salary support*

This grant supported the first 12 of 18 months of dedicated full-time work on clinical and translational research in urologic oncology under the mentorship of senior investigators in the department of Urology and affiliated departments and divisions within the Johns Hopkins Medical Institutions.

*Role: Research fellow*

## **CLINICAL ACTIVITIES**

### **Certification**

- North Carolina State Medical Board, 2008-present
- American Board of Urology: Diplomate, 2011
- Maryland State Board of Physicians, 2006-2009
- Intuitive Surgical daVinci Robot Certification—completed 11/17/2005

## **PROFESSIONAL SERVICE**

### **National Activities**

- Early Bladder Cancer Surveillance Working Group Leader, Bladder Cancer Advocacy Network (BCAN) Think Tank, 2011-present
- Scientific Advisory Board Member, Bladder Cancer Advocacy Network (BCAN), 2009-present
- Genitourinary Surgery Subcommittee Member, Cancer and Leukemia Group B (CALGB), 2009-present
- Abstract Reviewer, Applied Health Economics, Services and Policy Research, Society for Medical Decision Making Annual Meeting, 2011
- Discussant, Urologic Surgery Podium Session, American College of Surgeons Clinical Congress, Chicago, Illinois, 2009
- Consultant for fluorescent cystoscopy technology assessment, Bridgehead International Consulting, Newark, New Jersey, 2009

### **Regional Activities**

- North Carolina Oncology Association, At-Large Executive Board Member, 2010-present
- Medical Advisor, Triangle Bladder Cancer Support Group (monthly), Chapel Hill, North Carolina, September 2010-present
- Medical Advisor, Prostate Cancer Coalition of North Carolina, 2009-present

- Program Planning Committee Member, North Carolina Oncology Association Membership Meeting, August 12-13, 2011.
- Faculty Chair, Bladder Cancer Advocacy Network Patient Forum, Chapel Hill, North Carolina, May 15, 2010.

### **Institutional/Departmental Activities**

- Department of Surgery Peer Review Committee (quarterly), 2011-present
- Physician Service Leader for Institutional Performance Improvement Project (weekly), UNC Department of Surgery, Division of Urology, 2009-present
- Oncology Protocol Review Committee (twice monthly), Lineberger Comprehensive Cancer Center, UNC Chapel Hill School of Medicine, 2009-present
- Course Director, Landes Symposium on Advances in Urology, University of North Carolina Continuing Medical Education Programs, 2011
- Project Leader for Urology Medical Student Recruitment, Education and Curriculum Development Initiative, supported by the Lester Persky Endowment for Urology Research, Johns Hopkins Hospital, 2006-2008
- Resident Representative for Urology Department Faculty Meeting, Johns Hopkins Hospital, 2006-2008
- Urology Department Project Leader for Electronic Provider Order Entry (POE) implementation, Johns Hopkins Hospital, 2006
- Urology Department Representative, Johns Hopkins Hospital House Staff Council, 2005-2006
- Resident Representative, Johns Hopkins Hospital Radiation Oncology Internal Program Review, 2005
- Student Representative, Johns Hopkins Medical School Admissions Committee, 2001-2002

### **Grant Review Activities**

|      |                                                                                                                                                           |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2011 | External Reviewer for UNC Nutrition Obesity Research Center                                                                                               |
| 2010 | External reviewer for the South African Medical Research Council                                                                                          |
| 2007 | External reviewer for the U.S. Civilian Research and Development Foundation Cooperative Grants Program ( <a href="http://www.crdf.org">www.crdf.org</a> ) |

### **Ad Hoc Editorial Review Activities:**

- *Campbell-Walsh Textbook of Urology*
- *Cancer*
- *Cancer Epidemiology, Biomarkers & Prevention*
- *Clinical Cancer Research*
- *Urology*
- *Journal of Urology*
- *British Journal of Urology*
- *Cancer Investigation*
- *BMC Cancer*
- *World Journal of Urology*
- *Indian Journal of Urology*
- *Expert Review of Pharmacoeconomics & Outcomes Research*
- *Journal of Andrology*
- *Prostate Cancer and Prostatic Diseases*
- *Urologic Oncology: Seminars and Original Investigations*

### **Professional Societies**

- Society for Medical Decision Making, Active Member, 2010-present
- North Carolina Oncology Association, 2010-present
- American College of Surgeons, Associate Member, 2009-present
- American Society of Clinical Oncology, Active Member, 2009-present
- American Urological Association, Candidate Member, 2003-present

### **Reflective Statement**

I am indebted and thankful to the many mentors who inspired and taught me by their example to pursue a career in academic urological oncology. My academic interests in clinical outcomes, health services and translational research are driven by the questions and problems that arise in the care of patients in my areas of clinical expertise, specifically, prostate, bladder and kidney cancer. As an academic surgeon, I am driven by the motivation to seek the best possible treatment for my patients while seeking to inspire and educate the medical students and residents I work with, as my mentors did for me in those critical early phases of my own career.